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Notice of Allowability

Application No.

10/651,461

Examiner

Tuan T. Nguyen

Applicant(s)

WILLIAMS, LARRY LYNN

Art Unit

2824

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the Preliminary Amendment filed on 2/27/04.
2. ☒ The allowed claim(s) is/are 1-18.
3. ☒ The drawings filed on 27 February 2004 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|--|
| <ol style="list-style-type: none"> 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | <ol style="list-style-type: none"> 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____ 7. <input type="checkbox"/> Examiner's Amendment/Comment 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance 9. <input checked="" type="checkbox"/> Other <u>Attachment A: Search History.</u> |
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VANTHU NGUYEN
PRIMARY EXAMINER

DETAILED ACTION

Allowable Subject Matter

1. Claims 1-18 are allowed.
2. The following is an examiner's statement of reasons for allowance:

The prior art of record fail to disclose, in combination with other cited limitations, a method for speculatively reading data from a secondary storage device, the method comprising reading a first datum from a secondary storage device, the secondary storage device being capable of storing data on a storage medium; determining a probability of the secondary storage device receiving a read request for a second datum stored on the storage medium, the second datum being logically related to the first datum; if the probability is above a pre-determined probability value, then determining a cost to speculatively read the second datum, the cost being based on a position of a read/write head, relative to the second datum's physical location on the fixed medium, when the read/write head is reading the first datum; if the cost to speculatively read the second datum is below a pre-determined cost value, then reading the second datum without a request being received from outside the secondary storage device for the second datum; storing the second datum in a secondary storage device cache; and producing the second datum from the secondary storage device cache if the secondary storage device receives a later request for the second datum as recited in claims 1-9.

The prior art of record also fail to disclose, in combination with other cited limitations, a computer program product, residing on a computer usable medium, for speculatively reading data from a secondary storage device, the computer program product comprising program code for reading a first datum from a secondary storage device, the secondary storage device being

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capable of storing data on a storage medium; program code for determining a probability of the secondary storage device receiving a read request for a second datum stored on the storage medium, the second datum being logically related to the first datum; program code for, if the probability is above a pre-determined probability value, then determining a cost to speculatively read the second datum, the cost being based on a position of a read/write head, relative to the second datum's physical location on the fixed medium, when the read/write head is reading the first datum; program code for, if the cost to speculatively read the second datum is below a pre-determined cost value, then reading the second datum without a request being received from outside the secondary storage device for the second datum; program code for storing the second datum in a secondary storage device cache; and program code for producing the second datum from the secondary storage device cache if the secondary storage device receives a later request for the second datum as recited in claims 10-18.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan T. Nguyen whose telephone number is (571) 272-1880. The examiner can normally be reached on Mon-Fri.

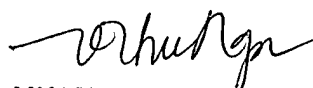
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Elms can be reached on (571) 272-1869. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

January 10, 2005



Tuan T. Nguyen
Patent Examiner
Art Unit 2824



VANTHU NGUYEN
PRIMARY EXAMINER